

Material Characteristics (Low Loss/Wide Temp.)

Optimal frequency						100~300KHz	100~300KHz	300~500KHz
ITEM	Symbol	Unit	Measure Condition			MZ97	MZ97B NEW	MZ97D NEW
			Frequency	Other condition	Temperature			
Initial Permeability	ui		100KHz	0.5mA	25℃	3300±25%	3300±25%	2400±25%
Core Loss	Pcv	mW/C.C	100K	200mT	25℃	330	295	255
					60℃	285	270	280
					100℃	270	280	365
					120℃	320	320	410
					140℃	370	370	475
			300K	100mT	25℃	300	250	170
					100℃	230	250	235
			500K	50mT	25℃	-	130	100
					100℃	-	150	130
Saturation Flux Density	Bms	mT	DC	H=1194 A/m	25℃	530	530	530
					100℃	420	420	430
Remanence	Brms	mT	DC	H=1194 A/m	25℃	73	80	80
					100℃	55	70	75
Coercivity	Hc	Oe	DC	H=1194 A/m	25℃	0.12	0.12	0.18
Curie Temperature	Tc	℃				>215	>215	>230
Density	d	g/cm3				>4.90	>4.90	>4.85

Material Characteristics (Low Loss/High Freq.)

Optimal frequency						0.5~0.8MHz	0.8~1MHz	0.5~5MHz
ITEM	Symbol	Unit	Measure Condition			MF37A	MF91S	MF93S
			Frequency	Other condition	Temperature	NEW		NEW
Initial Permeability	ui		100KHz	0.5mA	25℃	2100±25%	1000±25%	600±25%
Core Loss	Pcv	mW/C.C	500K	50mT	25℃	80	55	22
					60℃	75	35	
					100℃	65	40	
			500K	100mT	25℃	630	-	650
					100℃	630	-	600
			1000K	50mT	25℃	500	190	70
					100℃	520	160	80
			2000K	50mT	25℃	-	-	280
					100℃	-	-	310
			3000K	30mT	25℃	-	-	160
					100℃	-	-	230
			5000K	9mT	25℃	-	-	190
					100℃	-	-	320
Saturation Flux Density	Bms	mT	DC	H=1194 A/m	25℃	520	520	520
					100℃	430	430	430
Remanence	Brms	mT	DC	H=1194 A/m	25℃	88	133	51
Coercivity	Hc	Oe	DC	H=1194 A/m	25℃	0.20	0.45	0.59
Curie Temperature	Tc	℃				>250	>290	>290
Density	d	g/cm3				>4.80	>4.80	>4.80

Material Characteristics (High Bs)

ITEM	Symbol	Unit	Measure Condition			MB46	MB46A	MB49	MB92
			Frequency	Other condition	Temperature				
Initial Permeability	ui		100KHz	0.5mA	25℃	1600±25%	1800±25%	1900±25%	1000±25%
Core Loss	Pcv	mW/C.C	100K	200mT	25℃	920	860	1440	1360
					60℃	660	650	930	1000
					100℃	470	400	1170	1400
					120℃	690	590	1330	1570
					140℃				
Saturation Flux Density	Bms	mT	DC	H=1194 A/m	25℃	500	540	560	600
					100℃	430	450	460	510
					140℃				
Remanence	Brms	mT	DC	H=1194 A/m	25℃				
					100℃				
Coercivity	Hc	Oe	DC	H=1194 A/m	25℃				
Curie Temperature	Tc	℃				>290	>290	>210	>280
Density	d	g/cm3				>4.80	>4.80	>4.80	>4.90

Material Characteristics (High Bs)

ITEM	Symbol	Unit	Measure Condition			MB35	MB50
			Frequency	Other condition	Temperature		
Initial Permeability	ui		≤10KHz	0.25mT	25℃	3500± 25%	5000± 25%
Relative Loss Factor	tanδ/ui(10 ⁻⁶)		10KHz	<0.25mT	25℃	<8	<2
			100KHz			<8	<4.5
Temp. factor of permeability	α F	10 ⁻⁶ /℃	10KHz	<0.25mT	0~20℃	-1~1	-1~1
					20~70℃	-1~1	-1~1
Hysteresis Material Constant	η B	10 ⁻⁶ /mT	10KHz	1.5-3.0mT	25℃	<0.5	<0.5
Saturation Flux Density	Bms	mT	DC	H=1194 A/m	25℃	470	480
					100℃	340	345
Remanence	Brms	mT	DC	H=1194 A/m	25℃	63	71
Curie Temperature	Tc	℃				>190	>190
Density	d	g/cm3				>4.90	>4.90